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Check List
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LISTS OF SPECIES

Check List of Wild Angiosperms of Bhagwan Mahavir (Molem) National Park, Goa, India

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ABSTRACT: Bhagwan Mahavir (Molem) National Park, the only National park in Goa, was evaluated for it's diversity of Angiosperms. A total number of 721 wild species belonging to 119 families were documented from this protected area of which 126 are endemics. A checklist of these species is provided here.

INTRODUCTION

Protected areas are most important in many ways for conservation of biodiversity. Worldwide there are 102,102 Protected Areas covering 18.8 million km^2. India has a network of 660 Protected Areas including 99 National Parks, 514 Wildlife Sanctuaries, 43 Conservation Reserves and 4 Community Reserves covering a total of 158,373 km^2 of geographical area of the country which is approximately 4.82% (National Wildlife Database 2011). There are also 15 Biosphere Reserves and 30 Tiger Reserves as well. The Government of India has declared 2 biosphere reserves and 13 National Parks in the Western Ghats. (National Wildlife Database 2011).

Though fragmented, protected areas in Western Ghats of India are important from conservation point of view, because most of these areas are under threat of rapid destruction. Goa is an important state located along Western Ghats occupying an area of *c*. 600 km^2 out of the total 3702 km^2 geographical area of the state. Western Ghats range extends over the length of *c*. 125 km in Goa. Due to existence of two and recent declaration of two new protected areas, the prospects of conserving the rich biodiversity have increased. Bhagwan Mahavir National Park is one such habitat with tremendous diversity and forms an important constituent in the green jewel of Western ghats ranges in Goa.

Bhagwan Mahavir National Park also known as Molem National Park is the only National Park in Goa, spreading over a total area of 107 km^2 on the western escarpment of Western Ghats in the Sanguem Taluka of Goa between 15°14'09.82"-15°24'34.3" N latitude, 74°13'20.6"-74°20'02.92" E longitude (Figure 1). Dudhsagar waterfall, second largest waterfall in India, lies in Bhagwan Mahavir National Park. The National Park forms the core area of Bhagwan Mahavir Wildlife Sanctuary and is located on National Highway 4A (Panaji- Belgaum) *c*. 60 km from Panaji and *c*. 85 km from Belgaum. The National Park area is mountainous in terrain with succession of hills and valleys. The altitude ranges from 80 m to about 750 m above m. s. l. in the National Park. Tallest peak in the National Park is a hill near Karanzol railway station, which is about 753 m above m. s. l. The major types of rocks seen in the National Park are Laterite and Deccan trap Basalt (Naik, 1995). Soil in most places of the National Park area is laterite of high and low level type formed by natural metamorphosis and degradation of undulation rocks. Minerals like bauxite, iron and manganese are obtained from these soils. The general climate of the area is tropical with high percentage of humidity throughout the year. The variation in temperature does not exceed 20°C. The minimum temperature during the coldest month is about 15°C while maximum in summer is about 37°C (Naik, 1995). Monsoon starts during the first week of June. It extends up to the middle of October.

According to Champion and Seth (1968), the forest types in the National Park falls within the biogeographical province 5A/5B and contains pristine vegetation which

FIGURE 1. Location of Bhagwan Mahavir National Park.

is classified into three main forest types as explained below.

a. West Coast Tropical Evergreen Forests

The tall trees found in West Coast Tropical Evergreen Forests of the National Park include *Actinodaphne angustifolia, Canarium strictum, Diospyros buxifolia, Diospyros pruriens, Garcinia gummi-gutta, Holigarna grahamii, Knema attenuata, Mammea suriga, Polyalthia fragrans, Syzygium laetum, Vitex altissima,* etc. The middle-sized trees found are *Litsea coriacea, Aporusa cardiosperma, Antidesma acidum, Blachia andamanica* subsp. *denudata, Ixora nigricans, Psychotria dalzellii, Memecylon terminale, Dracaena terniflora*, etc. The trees found in the riparian forests are *Calophyllum calaba, Lophopetalum wightianum* and *Hydnocarpus pentandrus.* Some woody climbers or lianas found in this type of forests are *Entada rheedei, Gnetum ula, Chonemorpha fragrans, Ancistrocladus heyneanus, Luvunga eleutherandra, Paramignya monophylla* and *Toddalia asiatica*. Undergrowth is formed by shrubby species like *Dracaena terniflora, Ixora coccinea* and herbaceous species of families Cyperaceae, Zingiberaceae, Commelinaceae and Asteraceae.

Epiphytic plants in evergreen forests are restricted to family Orchidaceae (belonging to the genera like *Aerides, Bulbophyllum, Cymbidium, Eria* and *Vanda*) and Apocynaceae (*Hoya wightii).* Other epiphytes or lithophyres like *Utricularia striatula* and *Argostemma courtallense* are also found in the crevices of rocks and on trunks of tall trees where there is little soil and moisture. The herbaceous flora includes *Costus speciosus, Impatiens* spp., *Phyllanthus* spp., *Urena lobata, Gynura nitida,* etc.

b. West Coast Semi - Evergreen Forests

This type of forest is found in upper parts of ghats and lower elevations near stream beds. These forests are transitional between moist deciduous forests and evergreen forests. The semi- evergreen formations are seen with isolated patches of evergreen forests in ravines and valleys.

The following two edaphic types are found depending on local variation in soil and moisture within semi-evergreen forests.

A) Cane Breaks - These occur on the slopes of the ghat region. *Calamus thwaitesii* is more common in lower elevation areas.

B) Lateritic Semi - evergreen forests - These forests are distributed over elevations above 200 m. Important species found in these forests are *Actinodaphne angustifolia, Canthium dicoccum, Macaranga peltata, Careya arborea, Lagerstroemia lanceolata, Pterospermum diversifolium, Macaranga peltata,* etc. The second storey includes *Glochidion hohenackeri, Olea dioica, Ixora nigricans, Celtis timorensis,* etc. The shrubs found in undergrowth are *Chassalia curviflora* var. *ophioxyloides, Glycosmis pentaphylla, Maesa indica, Leea asiatica, L. indica, Crotalaria retusa* and *Gnidia glauca.* These species are often associated with climbing shrubs like *Connarus monocarpus* and *Clematis gouriana.* Some of the common herbs include *Impatiens balsamina, Cyperus* spp., *Asystasia dalzelliana, Cynarospermum asperrimum, Lindernia* spp., grasses such as *Apluda mutica, Eragrostis unioloides, Garnotia arboreum* and *Ischaemum* spp.

c. Moist Deciduous Forests

Most of the forest in the National Park between the altitudes from 80 to 200 m lies in this category. Important plants found in these areas are *Careya arborea, Dillenia pentagyna, Grewia tiliifolia, Lannea coromandeliaca, Terminalia* spp., *Schleichera oleosa, Xylia xylocarpa, Haldina cordifolia,* etc. Other trees found in moist deciduous forests are *Falconeria insignis, Wrightia* sp., *Flacourtia montana,* etc. The dominant families are Rubiaceae (*Ixora, Mitragyna),* Bignoniaceae (*Heterophragma, Stereospermum, Oroxylum)* Euphorbiaceae (*Mallotus, Glochidion, Antidesma, Bridelia*) and Leguminosae (*Dalbergia, Acacia, Albizia*). These elements are sometimes intermixed with species of *Dendrocalamus* and *Bambusa.* In the riparian patches, *Hopea ponga* and *Crateva magna* are seen. The shrubs or second storey of trees include *Catunaregam spinosa, Flemingia strobilifera, Canthium* spp., *Strychnos nux-vomica, Meyna laxiflora, Ziziphus xylopyrus, Xantolis tomentosa*. Common epiphyte, especially on most of the *Terminalia* spp. is *Rhynchostylis retusa. Aerides crispa* and *A. maculosa* are also found epiphytic on many trees. The ground flora in forest clearings and exposed situations comprises members of Leguminosae: Papilionoideae (*Geissaspis, Crotalaria, Indigofera, Alysicarpus, Desmodium, Tadehagi*), Acanthaceae (*Justicia, Lepidagathis, Rungia*), Rubiaceae (*Spermacoce, Neanotis, Hedyotis*), Euphorbiaceae (*Phyllanthus, Euphorbia*), Asteraceae (*Blumea, Elephantopus, Senecio, Phyllocephalum*) and Lamiaceae (*Leucas, Platostoma, Pogostemon, Hyptis*). In open areas climbers and twiners of Convolvulaceae, Leguminosae: Papilionoideae, Smilacaceae, Ranunculaceae have been recorded.

In addition to these forests, there are some plateaus and grasslands in the National Park. This varied vegetation is responsible for the diversity of the national park.

Materials and Methods

The present checklists of wild angiosperms of Bhagwan Mahavir National Park is an outcome of intensive and extensive field collections and laboratory work between the years 2001-2006. Plants were collected during regular field visits and were processed using standard methods. The identification was done using local and regional flora. (Dalgado 1898; Vartak 1966; Rao 1985-86; Naithani *et al.* 1997). The identity of the plants were confirmed by comparing with authentic specimens deposited at Agharkar Research Institute herbarium **(AHMA)**, Botanical Survey of India, Pune **(BSI),** Central National Herbarium, Howrah **(CAL),** Forest Research Institute, Dehra Dun **(DD)** and Goa University Herbarium. In addition, specimens collected by other collectors from Bhagwan Mahavir National Park in these herbaria were also studied. All the specimens collected during the work were deposited in Botanical Survey of India, Pune **(BSI).** A comprehensive checklist for wild angiosperms in the National Park is presented here giving their family, updated botanical names (Karthikeyan, *et al,* 2009; The Plant List 2010), local name if any, status of endemism and voucher specimen of that taxon (Table 1).

Results and Discussion

Intensive and extensive exploration tours covering all seasons in various ecosystems of Bhagwan Mahavir National Park have resulted in collection of about 1100

field numbers. The Angiosperm Flora of Bhagwan Mahavir National Park comprises of 119 families, 7 subfamilies, 490 genera and 721 species, which occur in the wild. The dicots are represented by 563 species (about 78% of the angiosperm flora) belonging to 381 genera and 93 families while monocots are represented by 158 species (about 22%) belonging to 109 genera and 26 families.

The largest family in the National Park according to number of species is Leguminosae represented by 63 species, followed by Poaceae (40), Rubiaceae (38), Euphorbiaceae, Orchidaceae and Acanthaceae (34 each). Some of the large genera found in Molem National Park are *Ficus* (12 species), *Eriocaulon* (09 species), *Diospyros* (08 species), *Utricularia* (07 species), *Habenaria, Impatiens, Lindernia, Murdannia,* and *Syzygium* (06 species each) and *Acacia, Crotalaria, Ixora, Ipomoea, Phyllanthus* and *Strobilanthes* (05 species each). Largest family according to number of genera in Bhagwan Mahavir National Park is Leguminosae (37 genera), followed by Poaceae (32), Rubiaceae (25), Orchidaceae (24), Apocynaceae and Euphorbiacae (22 each) and Asteraceae (21). Fifty six families are represented by single genus and 44 families are represented by single species. The pattern of dominance amongst families is almost similar to pattern discussed by Karthikeyan (2000) for Indian flora. Distribution as per the habit of the plant reveals that the flora constitutes 346 herbs, 103 shrubs, 192 trees, 66 climbers and 18 lianas. Habitats like lateritic plateaus and open areas show dominance of herbaceous elements while forested areas show dominance of arboreal members and lianas.

A total number of 126 species of endemic plants (Figures 2-5) are documented here. The endemic plants occurring in the National Park show a peculiar pattern of distribution. About 58% of the total endemic species, i.e. 74 species occurring in the National Park are endemic to Western Ghats while about 31 endemic species are endemic to Peninsular India. Rest other are endemic to India (7 species), Western India (3 species), Southern and Northern Western India (2 species each) and strictly endemic to Goa (2 Species), etc,. Bhagvan Mahaveer National Park, a comparatively smaller protected area, occupies 0.05% of the total area of Western Ghats but harbours about 8.4% of species of endemics that are endemic to Western Ghats. Leguminosae and Orchidaceae (12 species each) followed by Rubiaceae and Acanthaceae (10 species each) are dominant families in Endemic plants of National Park. Family Eriocaulaceae is not species rich but rich in endemic species.

The National Park area is just 2.5% of the total area of Goa, but it harbours about half of the species that occur in entire Goa. This point highlights the importance of the protected areas is conservation of the flora.

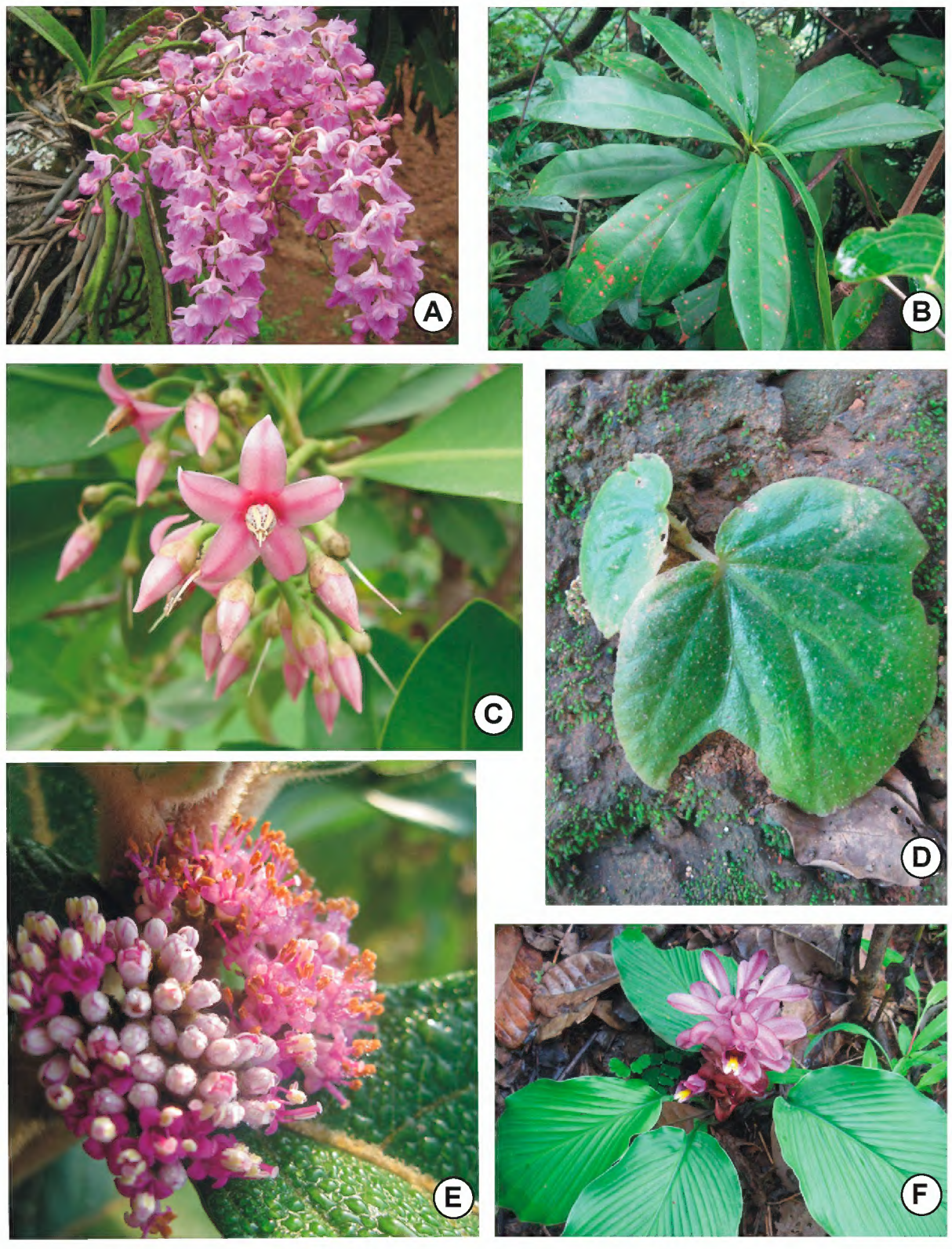

Figure 2. Some endemic species from the National Park . A) *Aerides maculosa*. B) *Ancistrocladus heyneanus*. C) *Ardisia solanacea*. D) *Begonia trichocarpa*. E) *Callicarpa tomentosa*. F) *Curcuma decipiens*.

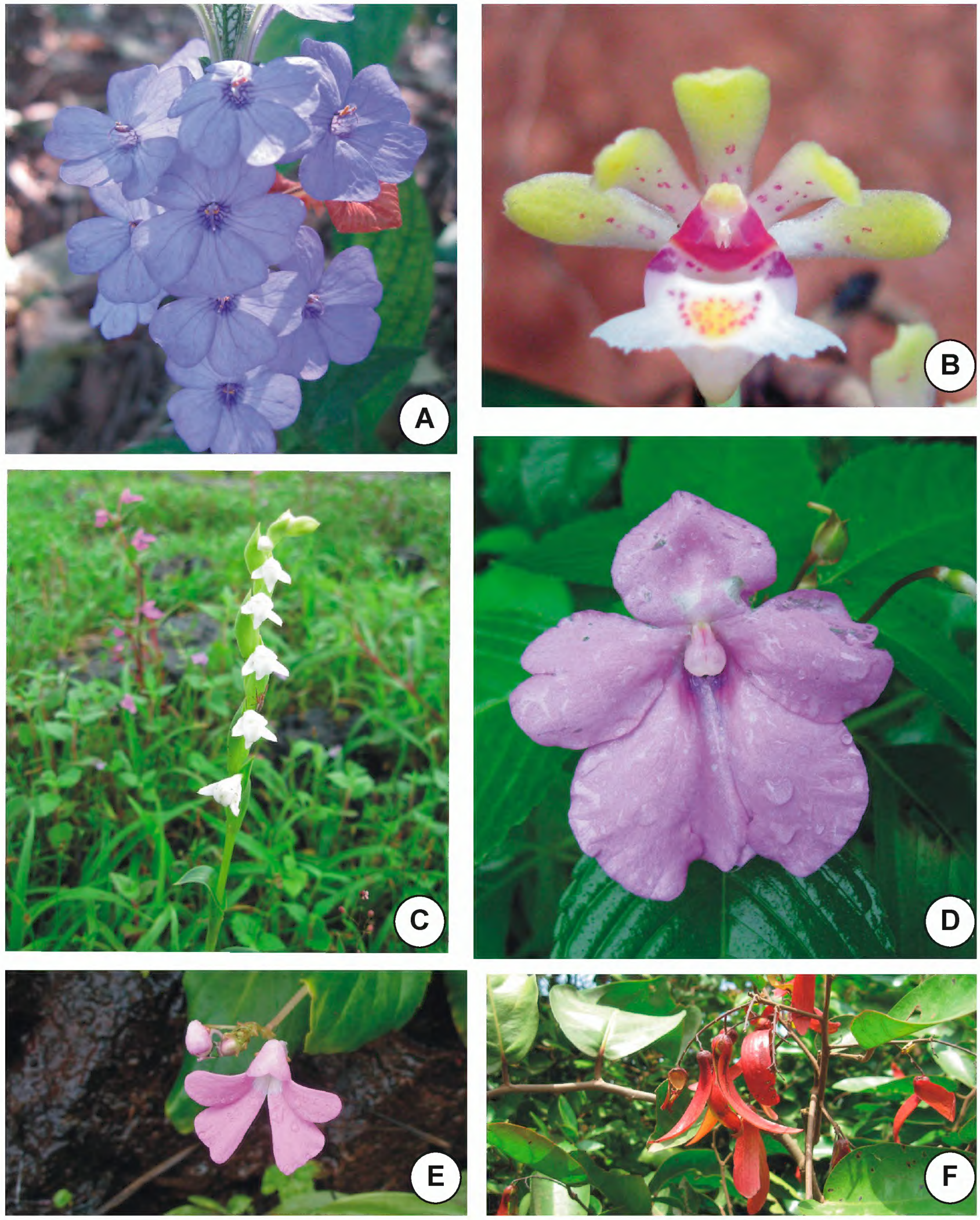

FIGURE 3. Some endemic species from the National Park . A) *Eranthemum roseum*. B) *Gastrochilus flabelliformis*. C) *Habenaria heyneana*. D) *Impatiens pulcherrima*. E) *Impatiens acaulis.* F) *Hopea ponga*.

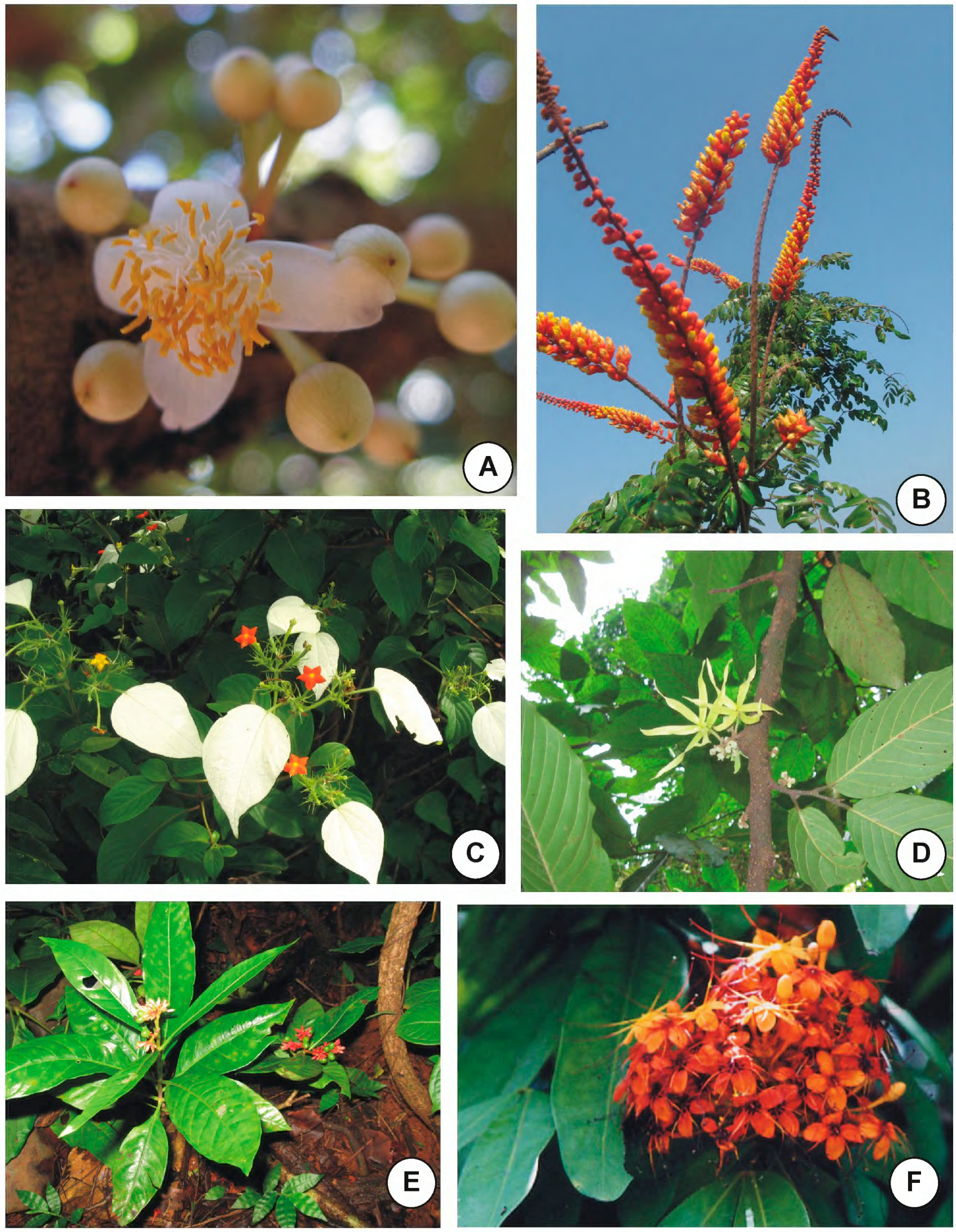

Figure 4. Some endemic species from the National Park . A) *mammea suriga*. B) *Moullava spicata*. C) *Mussaenda glabrata*. D) *Polyalthia fragrans*. E) *Rauvolfia serpentina.* F) *Saraca asoca*.

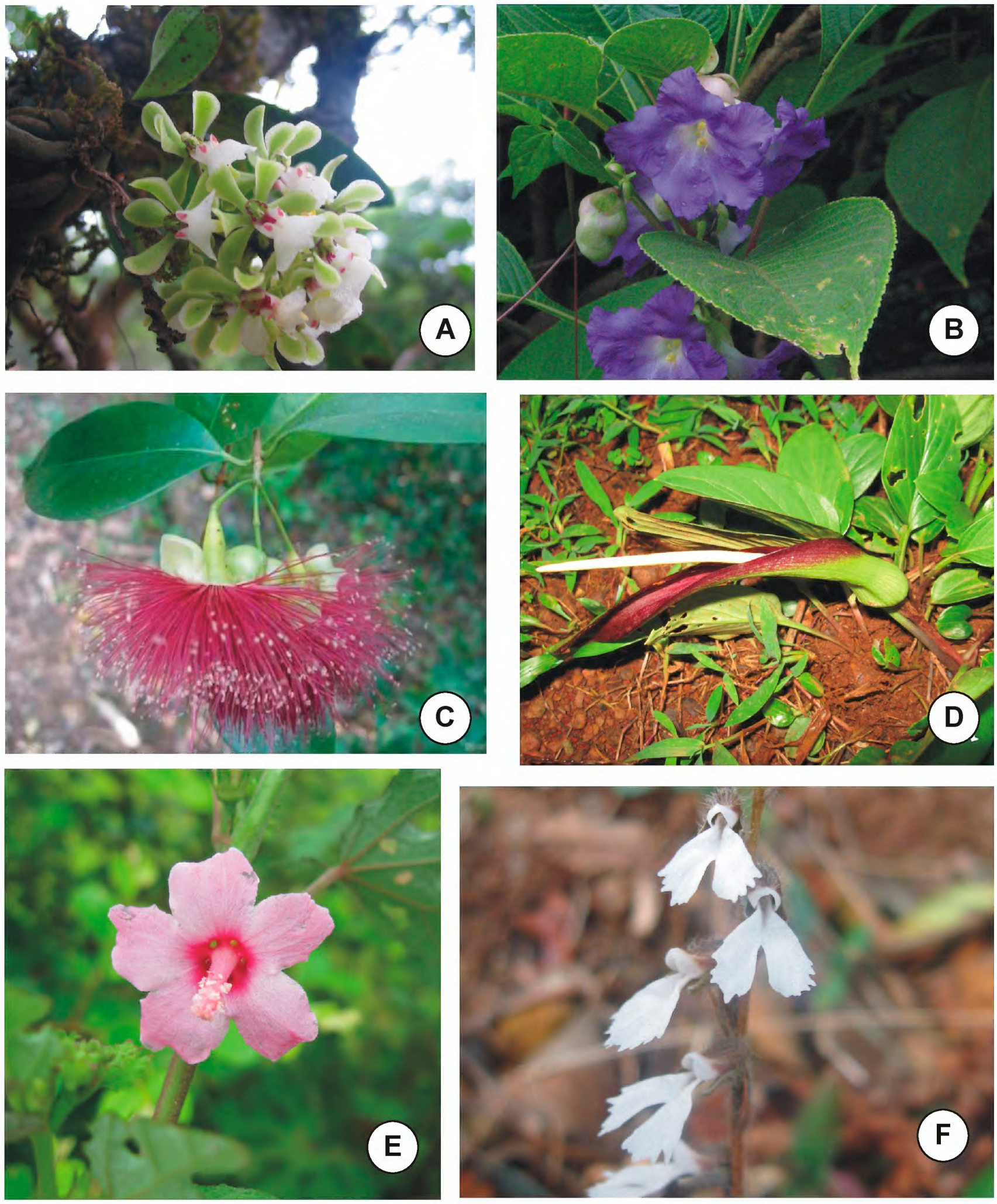

Figure 5. Some endemic species from the National Park . A) *Smithsonia viridiflora*. B) *Strobilanthes callosa*. C) *Syzygium laetum*. D) *Theriophonum dalzellii*. E) *Urena lobata.* F) *Zeuxine longilabris.*

Table 1. Wild Angiosperms of Bhagwan Mahavir National Park, Goa, India.

Abbreviations used for Endemism. WG- Western Ghats; PI -Peninsular India; PI and AN-Peninsular India, Andaman and Nicobar islands; IND- India; SWI- South West India; NWG- Northern Western Ghats; WI- Western India; WSI- Western and Southern India; PCI-Peninsular and Central India; WPI-Western Peninsular India; Goa- Goa state.
Acronyms and shortforms of herbaria to which Voucher specimens are reffered: AHMA: Herbarium of Agharkar Research Institute, Pune, India; BLAT: Blatter Herbarium, St. Xevier College Mumbai, India; DD: Forest Research Institute Herbarium, Dehradun, India; GU : Goa University herbarium, Goa, India (GU is not standard acronym- this is shortform used for convenience); BSI : Botanical Survey of India, Western Circle Herbarium, Pune, India;
*All the voucher specimens without any herbarium acryonym in bracket are refered to BSI.

SPECIES / FAMILY	LOCAL NAME	ENDEMISM	VOUCHER NUMBER *
ACANTHACEAE			
Andrographis paniculata (Burm. *f.*) Wall. *ex* Nees	Chirayat		188542
Asystasia dalzelliana Santapau		Endemic WG	179008
Barleria prattensis Santapau			410(GU)
Barleria prionitis L.			179224
Barleria terminalis Nees			188582
Cynarospermum asperrimum (Nees) Vollesen		Endemic PCI	179098
Dicliptera foetida (Forssk.) Blatt.			179073
Ecbolium ligustrinum (Vahl) Vollesen			186798
Eranthemum capense L. var. *concanensis* (T. Anderson *ex* C. B. Clarke) Santapau		Endemic WG	186720
Eranthemum roseum (Vahl) R. Br.		Endemic WG	179225
Gymnostachyum glabrum (Dalzell) T. Anderson			186989
Haplanthodes tentaculatus (L.) R. B. Majumdar			187596
Hemigraphis latebrosa (B. Heyne *ex* Roth) Nees			186202
Hygrophila pinnatifida (Dalzell) Sreem.			188583
Hygrophila ringens (L.) R. Br. *ex* Steud.			187557
Hygrophila schulli (Buch.-Ham.) M. R. Almeida and S. M. Almeida			179058
Justicia adhatoda L.	Adulsa		124002
Justicia procumbens L.			124218
Justicia simplex D. Don			179019
Justicia wynaadensis (Nees) Heyne *ex* T. Anderson		Endemic WG	187501
Lepidagathis cuspidata Nees			187547
Lepidagathis incurva Buch.- Ham. *ex* D. Don var. *mucronata* (Nees) C. B. Clarke *ex* T. Cooke			186207
Lepidagathis lutea Dalzell	Koche		179260
Lepidagathis prostrata Dalzell			187597
Nelsonia canescens (Lam.) Spreng.			186220
Phaulopsis imbricata (Forssk.) Sweet			187566
Pseuderanthemum malabaricum (C. B. Clarke) Gamble			186232
Rostellularia japonica (Thunb.) Ellis			179253
Rungia parviflora (Retz.) Nees subsp. *pectinata* (L.) L. H. Cramer			186303
Strobilanthes callosus Nees	Karaw	Endemic WI	124217
Strobilanthes ciliata Nees		Endemic WG	179264
Strobilanthes heyneanus Nees	Karaw	Endemic PI	187534
Strobilanthes integrifolia (Dalzell) Kuntze		Endemic WG	186978
Strobilanthes ixiocephalus Benth.	Kaarw	Endemic WG	188537
ALISMATACEAE			
Wiesneria triandra (Dalzell) Micheli			863(GU)
AMARANTHACEAE			
Achyranthes aspera L.			188588
Alternanthera sessilis (L.) R. Br. *ex* DC.			187912
Amaranthus spinosus L.			179014
Celosia argentea L.			179223
Cyathula prostrata (L.) Blume			84994
AMARYLLIDACEAE			
Crinum lorifolium Roxb. *ex* Ker Gawl.			189325
Crinum viviparum (Lam.) R. Ansari and V. J. Nair			187983
Pancratium triflorum Roxb.			187947
ANACARDIACEAE			
Anacardium occidentale L.	Kaju		186976
Buchanania lanzan Spreng.	Char		178922
Holigarna arnottiana Hook. *f.*	Bibba	Endemic WG	186208

Table 1. ***Continued.***

SPECIES / FAMILY	LOCAL NAME	ENDEMISM	VOUCHER NUMBER *
Holigarna grahamii (Wight) Kurz		Endemic WG	179294
Lannea coromandelica (Houtt.) Merr.			188545
Mangifera indica L.	Amba		186972
Nothopegia beddomei Gamble		Endemic WG	188575
Nothopegia castaneifolia (Roth) Ding Hou		Endemic WG	186249
ANCISTROCLADACEAE			
Ancistrocladus heyneanus Wall. *ex* J. Graham		Endemic WG	186923
ANNONACEAE			
Miliusa tomentosa (Roxb.) Finet and Gagnep.			187918
Orophea zeylanica Hook. *f.* and Thomson			1718(GU)
Polyalthia fragrans (Dalzell) Bedd.		Endemic WG	179293
Sageraea laurina Dalzell	Sadni	Endemic WG	179203
Uvaria narnum (Dunal) Blume			186284
ANTHERICACEAE			
Chlorophytum heynei Rottl. *ex* Baker			186357
APIACEAE			
Centella asiatica (L.) Urb.			186724
Pimpinella wallichiana (Miq. *ex* Hohen.) Gandhi			186916
APOCYNACEAE: SUBFAMILY ASCLEPIADOIDEAE			
Asclepias curassavica L.			186234
Calotropis gigantea (L.) R. Br.			85065
Cynanchum callialata Buch.-Ham. *ex* Wight			1136(GU)
Dregea volubilis (L. *f.*) Benth. *ex* Hook. *f.*			186715
Genianthus laurifolius (Roxb.) Hook. *f.*			188585
Gymnema sylvestre (Retz.) R. Br. *ex* Schult.			187574
Holostemma annulare (Roxb.) K. Schum.			124358
Hoya wightii Hook. *f.*		Endemic PI	188569
Tylophora fasciculata Buch.- Ham. *ex* Wight and Arn.			186723
APOCYNACEAE: SUBFAMILY APOCYNOIDEAE			
Aganosma cymosa (Roxb.) G. Don			186316B
Anodendron paniculatum (Roxb.) A. DC.			187536
Chonemorpha fragrans (Moon) Alston			186297
Holarrhena pubescens (Buch.- Ham) Wall. *ex* G. Don			186263
Ichnocarpus frutescens (L.) W. T. Aiton			179229
Parsonsia alboflavescens (Dennst.) Mabb.			88510
Wrightia arborea (Dennst.) Mabb.			1476(GU)
Wrightia tinctoria (Roxb.) R. Br.			3372(DD)
APOCYNACEAE: SUBFAMILY- RAUVOLFIOIDEAE			
Alstonia scholaris (L.) R. Br.			188557
Carissa spinarum L.			186312
Rauvolfia serpentina (L.) Benth. *ex* Kurz			124437
Tabernaemontana alternifolia L.		Endemic WSI	179113
APOCYNACEAE: SUBFAMILY PERIPLOCOIDEAE			
Cryptolepis buchananii R. Br. *ex* Roem. and Schult.			187545
Hemidesmus indicus (L.) R. Br.			186953
ARACEAE			
Amorphophallus bulbifer (Roxb.) Blume			179138
Amorphophallus commutatus (Schott) Engl. var. *commutatus*		Endemic PI	186339
Amorphophallus commutatus var. *anmodensis* Sivad. and Jaleel		Endemic Goa	187920
Amorphophallus paeoniifolius (Dennst.) Nicolson			179180
Ariopsis peltata Nimmo			187924
Arisaema sivadasanii S. R. Yadav, K. S. Patil and Janarth.		Endemic WG	1886338
Arisaema tortuosum (Wall.) Schott			186711
Cryptocoryne retrospiralis (Roxb.) Kunth			179231
Lagenandra ovata (L.) Thwaites			179291
Pothos scandens L.			179106
Theriophonum dalzelli Schott.		Endemic WG	186356

Table 1. ***Continued.***

SPECIES / FAMILY	LOCAL NAME	ENDEMISM	VOUCHER NUMBER *
ARALIACEAE			
Schefflera elliptica (Blume) Harms			187544
ARECACEAE			
Arenga wightii Griff		Endemic WG	186356
Calamus pseudotenuis Becc.	Wet		189336
Calamus thwaitesii Becc.	Wet		179104
Caryota urens L.	Bherli mad		186942
ARISTROLOCHIACEAE			
Thottea siliquosa (Lam.) Ding Hou			177573
ASPARAGACEAE			
Asparagus racemosus Willd.			179044
ASTERACEAE			
Acanthospermum hispidum DC.			188541
Ageratum conyzoides L.			187956
Bidens biternata (Lour.) Merr. and Sherff			186910
Blumea belangeriana DC.		Endemic PI	186960
Blumea membranacea DC.			186241
Blumea oxyodonta DC.			186240
Blumea virens DC.			186967
Cyathocline purpurea (Buch.- Ham. *ex* D. Don) Kuntze			179068
Dichrocephala integrifolia (L. *f.*) Kuntze			186(GU)
Eclipta prostrata (L.) L.			179038
Elephantopus scaber L.			179074
Emilia sonchifolia (L.) DC.			179025
Erigeron sublyratus DC.			186327
Eupatorium odoratum L.			188544
Gnaphalium polycaulon Pers.			186224
Grangea maderaspatana (L.) Poir.			188523
Gynura nitida DC.			186264
Phyllocephalum phyllolaenum (DC.) Narayana			179002
Phyllocephalum ritchiei (Hook. *f.*) Narayana		Endemic PI	179075
Senecio belgaumensis (Wight) C. B. Clarke			179001
Senecio gibsonii Hook. *f.*		Endemic WG	124060
Spilanthes paniculata Wall. *ex* DC.			179219
Synedrella nodiflora (L.) Gaertn.			187549
Tricholepis glaberrima DC.			179096
Tridax procumbens L.			179096
Vernonia cinerea (L.) Less.			179177
BALSAMINACEAE			
Impatiens acaulis Arn.			179102
Impatiens balsamina L.	Terda		179195
Impatiens lawii Hook. *f.* and Thomson			125370
Impatiens minor (DC.) Bennet		Endemic WG	187963
Impatiens oppositifolia L.			124290
Impatiens pulcherrima Dalzell		Endemic WG	179063
BEGONIACEAE			
Begonia crenata Drynad.			179170
Begonia trichocarpa Dalzell		Endemic NWG	187995
BIGNONIACEAE			
Heterophragma quadriloculare (Roxb.) K. Schum.	Kuski		186973
Oroxylum indicum (L.) Benth. *ex* Kurz			179050A
Pajanelia longifolia (Willd.) K. Schum.	Padwal		186720
Stereospermum colais (Buch.- Ham. *ex* Dillw.) Mabb.			186370
BOMBACACEAE			
Bombax ceiba L.	Sawar		186291
Bombax insigne Wall.			188574
BORAGINACEAE			
Coldenia procumbens L.			189313

Table 1. ***Continued.***

SPECIES / FAMILY	LOCAL NAME	ENDEMISM	VOUCHER NUMBER *
Cynoglossum zeylanicum (Vahl *ex* Hornem.) Thunb. *ex* Lehm.			1099(GU)
Ehretia canarensis (C. B. Clarke) Gamble			186944
Paracaryopsis coelestina (Lindl.) R. R. Mill			187996
Rotula aquatica Lour.			186770
BUDDLEJACEAE			
Buddleja asiatica Lour.			179071
BURMANNIACEAE			
Burmannia pusilla (Wall. *ex* Miers) Thwaites			179048
BURSERACEAE			
Canarium strictum Roxb.	Dhup		187530
CAMPANULACEAE			
Lobelia alsinoides Lam.			179266
Lobelia nicotianaefolia Roth *ex* Roem. and Schult.	Rantambaku		186309
CAPPARACEAE			
Capparis rheedei DC.		Endemic WG	188571
Cleome viscosa L.			189307
CARYOPHYLLACEAE			
Polycarpon prostratum (Forssk.) Asch. and Schweinf.			186347
CELASTRACEAE			
Celastrus paniculata Willd			186292
Euonymus indicus B. Heyne *ex* Wall.		Endemic PI and AN	186945
Hippocratea grahamii Wight			1256(GU)
Hippocratea indica Willd.			179257
Hippocratea obtusifolia Roxb.			2614(DD)
Lophopetalum wigtianum Arn.			187558
Maytenus rothiana (Walp.) Lobreau- Callen			188553
Salacia chinensis L.	Narbundi		186290
Salacia oblonga Wall *ex* Wight and Arn.			186298
CLEOMACEAE			
Crateva magna (Lour.) DC.			186336
CLUSIACEAE			
Calophyllum calaba L.	Wiray	Endemic WG	186769
Calophyllum polyanthum Wall. *ex* Choisy			187532
Garcinia gummi-gutta (L.) N. Robson		Endemic WG	187531
Garcinia indica (Thouars) Choisy	Bhirand, Kokam, Aamsul	Endemic WG	179213
Garcinia morella (Gaertn.) Desr.			179242
Mammea suriga (Buch.-Ham. *ex* Roxb.) Kosterm.	Surangi		186272
Mesua ferrea L.	Nag-Chapha		179206
COLCHICACEAE			
Gloriosa superba L.			179039
Iphiginea indica (L.) A. Grey *ex* Kunth			868(GU)
COMBRETACEAE			
Combretum latifolium Blume			187585
Getonia floribunda Roxb.	Uski		186961
Terminalia bellirica (Gaertn.) Roxb.			186921
Terminalia chebula Retz.			188563
Terminalia elliptica Willd.	Matti, Madat		188591
Terminalia paniculata Roth	Kindal	Endemic PI	179026
COMMELINACEAE			
Commelina benghalensis L.			124075
Commelina forsskalaei Vahl			186384
Cyanotis fasciculata (B. Heyne *ex* Roth) Schult. and Schult. *f.*			124006
Cynotis cristata (L.) D. Don			124120
Floscopa scandens Lour.			179288
Murdannia dimorpha (Dalzell) G. Brückn.			124119
Murdannia japonica (Thunb.) Faden			186943
Murdannia semiteres (Dalzell) Santapau			187980

Table 1. ***Continued.***

SPECIES / FAMILY	LOCAL NAME	ENDEMISM	VOUCHER NUMBER *
Murdannia simplex (Vahl) Brenan			179188
Murdannia spirata (L.) G. Bruckn.			124341
Murdannia versicolor (Dalzell) G. Brückn.			179183
CONNARACEAE			
Connarus monocarpus L.	Ghagrya		186250
CONVALLARIACEAE			
Ophiopogon intermedius D. Don			186773
CONVOLVULACEAE			
Argyreia elliptica (Roth) Choisy			186949
Argyreia involucrata C. B. Clarke			186216
Erycibe paniculata Roxb.			179240
Evolvulus nummularius (L.) L.			179215
Ipomoea campanulata L.			186205
Ipomoea nil (L.) Roth			188507
Ipomoea obscura (L.) Ker Gawl.			187926
Ipomoea sinensis (Desv.) Choisy			179161
Ipomoea violacea L.			186940
Merremia umbellata (L.) Hall *f.*	Washel		186212
Merremia vitifolia (Burm. *f.*) Hall *f.*			186223
CORNACEAE			
Mastixia arborea (Wight.) Bedd.			6116 (DD)
COSTACEAE			
Costus speciosus (J. J.König) J. E. Sm.			124226
CRASSULACEAE			
Kalanchoe pinnata (Lam.) Pers.			188526
CUCURBITACEAE			
Coccinia grandis (L.) Voigt	Tendli		186722
Cucumis melo L.			2684(DD)
Momordica dioica Roxb. *ex* Willd.			186365
Mukia maderaspatana (L.) M. Roem.			179166B
Solena amplexicaulis (Lam.) Gandhi			186744
Trichosanthes cucumerina L.	Kondal, Fagal		187951
Zanonia indica L.			179062
CYPERACEAE			
Carex caricina (D. Don) Ghildyal and U. C. Bhattach. var. *caricina*.			124430
Carex caricina (D. Don) Ghildyal and U. C. Bhattach. var. *glaucina* (Boeck.) Ghildyal and U. C. Bhattach.		Endemic PI	543(BLAT)
Cyperus haspan L. subsp. *haspan*.			124077
Cyperus haspan L. subsp. *juncoides* (Lam.) Kuk.			144252
Cyperus iria L.			179150
Diplacrum caricinum R. Br.			186778
Eleocharis acutangula (Roxb.) Schult.			186751
Fimbristylis dichotoma (L.) Vahl			179121
Fimbristylis lawiana (Boeck.) J. Kern			186727
Fimbristylis ovata (Burm. *f.*) J. Kern			186772
Fimbristylis woodrowii C. B. Clarke		Endemic WPI	174234
Hypolytrum nemorum (Vahl) Spreng.			186951
Kyllinga brevifolia Rottb.			186764
Lipocarpha squarrosa (L.) Goetgh.			124081
Mariscus compactus (Retz.) Bold.			186924
Mariscus paniceus (Rottb.) Vahl			186738
Pycreus flavidus (Retz.) T. Koyma			179199
Pycreus malabaricus C. B. Clarke			186390
Pycreus pumilus (L.) Nees			124235
Pycreus sanguinolentus (Vahl) Nees			179145
Rhynchospora wightiana (Nees) Steud.			179047
Scleria terrestris (L.) Fassett			85008

Table 1. ***Continued.***

SPECIES / FAMILY	LOCAL NAME	ENDEMISM	VOUCHER NUMBER *
DATISCACEAE			
Tetrameles nudiflora R. Br.			187523
DILLENIACEAE			
Dillenia pentagyna Roxb.	Karmal		1711(DD)
DIOSCOREACEAE			
Dioscorea bulbifera L.			179137
Dioscorea hispida Dennst.			179021
Dioscorea pentaphylla L.			187959
DIPTEROCARPACEAE			
Hopea ponga (Dennst.) Mabb.		Endemic WG	186975
DRACAENACEAE			
Dracaena terniflora Roxb.			107153
DROSERACEAE			
Drosera indica L.			186704
EBENACEAE			
Diospyros buxifolia (Blume) Hiern			188532
Diospyros candolleana Wight			186288
Diospyros crumenata Thwaites			1261A(GU)
Diospyros montana Roxb.	Kalakonda		186396
Diospyros neilgerrensis (Wight) Kosterm.		Endemic PI	186296
Diospyros oocarpa Thw.			186231
Diospyros paniculata Dalzell		Endemic IND	186214
Diospyros pruriens Dalzell			179178
ELAEAGNACEAE			
Elaeagnus conferta Roxb.			187507
ERIOCAULACEAE			
Eriocaulon dalzellii Koern.		Endemic WG	1671(GU)
Eriocaulon eurypeplon Koern.		Endemic WG	84990
Eriocaulon heterolepis Steud.		Endemic WI	124357
Eriocaulon lanceolatum Miq. *ex* Koern.		Endemic WG	1075(GU)
Eriocaulon robusto-brownianum Ruhland			867A(GU)
Eriocaulon sexangulare L.			187985
Eriocaulon stellulatum Koern.		Endemic WG	124156
Eriocaulon xeranthemum Mart.			124122
Eroicaulon palghatense R. Ansari and N. P. Balakr.		Endemic WG	187972
EUPHORBIACEAE *s.l.*			
Actephila excelsa (Dalzell) Mull. Arg.			179269
Agrostistachys indica Dalzell			187527
Antidesma acidum Retz.			179164
Antidesma menasu (Tul.) Mull. Arg.			176967
Aporusa cardiosperma (Gaertn.) Merr.			179268
Baliospermum montanum (Willd.) Mull. Arg.			186209
Blachia andamanica (Kurz) Hook. *f.* subsp. *denudata* (Benth.) N. P. Balakr. and Chakrab.		Endemic WG	186922
Breynia retusa (Dennst.) Alston			179169
Bridelia retusa (L.) A. Juss.			186315
Bridelia stipularis Blume			179070
Croton persimilis Mull. Arg.			1250(GU)
Dimorphocalyx glabellus Thwaites var. *lawianus* (Mull. Arg.) Chakrab. and N. P. Balakr.		Endemic WG	186926
Drypetes venusta (Wight) Pax and K. Hoffm.			1355(GU)
Euphorbia erythroclada Boiss		Endemic PCI	853(GU)
Euphorbia hirta L.			186222
Euphorbia ligularia Roxb.			189337
Euphorbia notoptera Boiss.		Endemic WG	179029
Falconeria insignis Royle			186931
Glochidion hohenackeri (Mull.- Arg.) Bedd.		Endemic NWG	179124
Glochidion zeylanicum (Gaertn.) A. Juss.			88504

Table 1. ***Continued.***

SPECIES / FAMILY	LOCAL NAME	ENDEMISM	VOUCHER NUMBER *
Homonoia riparia Lour.			186268
Jatropha curcas L.			187941
Macaranga peltata (Roxb.) Mull. Arg.	Chanda		188555
Mallotus ferrugineus (Roxb.) Mull. Arg.			189331
Mallotus philippensis (Lam.) Mull. Arg.			179256
Mallotus resinous (Blanco) Merr. var. *stenanthus* (Mull. Arg.) Susila and N. P. Balakr.		Endemic WG	179245
Margaritaria indica (Dalzell) Airy Shaw			1580(GU)
Microstachys chamaelea (L.) Mull. Arg.			179211
Phyllanthus amarus Schumach. and Thonn.			179136
Phyllanthus emblica L.	Awla		186228
Phyllanthus juniperinus Mull. Arg.			186771
Phyllanthus simplex Retz.			189302
Phyllanthus urinaria L.			124854
Tragia praetervis Chakrab. and N. P. Balakr.			179090
FLACOURTIACEAE			
Casearia ovata (Lam.) Willd.			186313
Flacourtia montana J. Graham	Chaper	Endemic WG	179060
Homalium ceylanicum (Gardn.) Benth.			187914
Hydnocarpus pentandrus (Buch.-Ham.) Oken	Kastal	Endemic WG	186210
GENTIANACEAE			
Canscora diffusa (Vahl) R. Br. *ex* Roem and Schult.			186204
Canscora perfoliata Lam.		Endemic WG	179234
Exacum pumilum Griseb.			179036
Exacum tetragonum Roxb.			179185
Hoppea fastigiata (Griseb.) C. B. Clarke			124291
GESNERIACEAE			
Rhynchoglossum notonianum (Wall.) Burtt			179026
Rhynchoglossum obliquum Blume var. *parviflorum* C. B. Clarke			186761
HYCINTHACEAE			
Ledebouria revoluta (L. *f.*) Jessop			187948
HYDROCHARITACEAE			
Blyxa aubertii Rich.			1072(GU)
Vallisneria spiralis L.			186750
HYACINTHACEAE			
Curculigo orchioides Gaertn.			179003
ICACINACEAE			
Gomphandra tetrandra (Wall.) Sleumer			186915
Nothapodytes nimmoniana (J. Graham) Mabb.			179110
Sarcostigma kleinii Wight and Arn.			2872(DD)
LAMIACEAE			
Anisomeles indica (L.) Kuntze		Endemic WG	179095
Callicarpa tomentosa (L.) L.			179235
Clerodendrum infortunatum L.			179130
Colebrookea oppositifolia Sm.			187508
Gmelina arborea Roxb.	Shiwan		187555
Hyptis capitata Jacq.			179232
Hyptis suaveolens (L.) Poit.			84333
Leucas biflora (Vahl) R. Br. *ex* Sm.			179148
Leucas ciliata Benth.			179083
Leucas lavendulifolia Sm.			124125
Leucas stelligera Wall.			85010
Platostoma hispidum (L.) A. J. Paton			186783
Pogostemon paniculatus (Willd.) Benth			186211
Pogostemon purpurascens Dalzell			1277(GU)
Premna coriacea C. B. Clarke			186305
Rotheca serrata (L.) D. A. Steane and Mabb.			124145
Scutellaria discolor Colebr.			179263

TABLE 1. ***CONTINUED.***

SPECIES / FAMILY	LOCAL NAME	ENDEMISM	VOUCHER NUMBER *
Tectona grandis L. *f.*	Sagon		2389(DD)
Vitex altissima L. *f.*	Bailado		186266
Vitex leucoxylon L. *f.*			186968
Vitex negundo L.			187931
LAURACEAE			
Actinodaphne angustifolia (Blume) Nees			186293
Beilschmiedia dalzellii (Meisn.) Kosterm.	Miryo		185688
Cinnamomum nitidum (Roxb.) Hook.			1407(GU)
Cinnamomum sulphuratum Nees	TiKki		179239
Cinnamomum verum J. Presl	TiKki		1711(GU)
Cryptocarya lawsonii Gamble		Endemic WG	1702(GU)
Litsea coriacea (Heyne *ex* Meisn.) Hook. *f.*		Endemic WG	186914
Litsea ghatica C. J. Saldanha		Endemic WG	188567
Persea macrantha (Nees) Kosterm.	Olamb		187583
LECYTHIDACEAE			
Carey arborea Roxb.	Kumyo		6187(DD)
LEEACEAE			
Leea asiatica (L.) Ridsdale			179230
Leea indica (Burm. *f.*) Merr.	Dino		186770
LEGUMINOSAE: SUBFAMILY CAESALPINIOIDEAE			
Bauhinia malabarica Roxb.			188572
Bauhinia racemosa Lam.	Apto		188520
Caesalpinia mimosoides Lam.	Pansi		186213
Cassia fistula L.	Bayo		186314
Chamaecrista absus (L.) H. S. Irwin and Barneby			179200
Moullava spicata (Dalzell) Nicolson	Shamachi Wal	Endemic PI	88495
Saraca asoca (Roxb.) W. J. de Wilde	Ashok		186227
Senna hirsuta (L.) H. S. Irwin and Barneby	Taykolo		540(GU)
Senna obtusifolia (L.) H. S. Irwin and Barneby			179267
Senna tora (L.) Roxb.			188509
LEGUMINOSAE: SUBFAMILY MIMOSOIDEAE			
Acacia caesia (L.) Willd.			185737
Acacia chundra (Roxb. and Rottl.) Willd.			186754
Acacia concinna (Willd.) DC.	Shikekai		188577
Acacia pennata (L.) Willd.			179057
Acacia torta (Roxb.) Craib.			88501
Albizia chinensis (Osbeck.) Merr.			188558
Albizia odoratissima (L. *f.*) Benth.			187903
Entada rheedei Spreng.	Garmbi		187988
Mimosa pudica L.			183635
Xylia xylocarpa (Roxb.) Taub.	Jambha		187970
LEGUMINOSAE: SUBFAMILY PAPILIONOIDEAE			
Abrus pulchellus Wall. *ex* Thwaites	Gunj		188508
Aeschynomene indica L.			179281
Alysicarpus bupleurifolius (L.) DC.			186782
Alysicarpus glumaceus (Vahl.) DC.			186936
Butea monosperma (Lam.) Taub.	Palas		186966
Cajanus lineatus (Wight and Arn.) Maesen			186251
Crotalaria filipes Benth.		Endemic WG	179227
Crotalaria lutescens Dalzell		Endemic WG	187966
Crotalaria pallida Aiton			179222
Crotalaria prostrata Rottl.			186318
Crotalaria retusa L.			186988
Dalbergia horrida (Dennst.) Mabb.		Endemic WG	179274
Dalbergia latifolia Roxb.	Sisam		3448(DD)
Dalbergia rubiginosa Roxb.		Endemic PI	2869(DD)
Dendrolobium triangulare (Retz.) Schindl.			179127
Derris heyneana (Wight and Arn.) Benth.		Endemic PI	187595

TABLE 1. ***CONTINUED.***

SPECIES / FAMILY	LOCAL NAME	ENDEMISM	VOUCHER NUMBER *
Desmodium heterocarpon (L.) DC.			186767
Desmodium *laxiflorum* DC.			186787
Desmodium motorium (Houtt.) Merr.			179283
Desmodium triflorum (L.) DC.			186941
Erithrina stricta Roxb.	Pangaro		189327
Flemingia macrophylla (Willd.) Kuntze *ex* Merr.			186948
Flemingia strobilifera (L.) R. Br. *ex* W. T. Aiton			186201
Flemingia tuberosa Dalzell		Endemic PI	179043
Geissaspis cristata Wight and Arn.			179159
Geissaspis tenella Benth.		Endemic PI	179015
Indigofera dalzelli T. Cooke		Endemic WG	179040
Indigofera prostrata Willd.		Endemic PI	186785
Mucuna monosperma DC.			187586
Paraderris canarensis (Dalzell) Adema			88499
Pongamia pinnata (L.) Pierre	Karanji		186979
Sesbania bispinosa (Jacq.) W. Wight			186939
Smithia bigemina Dalzell			207(GU)
Smithia conferta J. E. Sm			187895
Smithia salsuginea Hance		Endemic PI	186765
Spatholobus parviflorus (Roxb. *ex* DC.) Kuntze			187570
Spatholobus purpureus Benth. *ex* Prain			1260(GU)
Tadehagi triquetrum (L.) H. Ohashi			179076
Tephrosia candida (Roxb.) DC.			1163(GU)
Tephrosia coccinea Wall.		Endemic PI	179023
Teramnus labialis (L. *f.*) Spreng.			179042
Uraria rufescens (DC) Schindl.			179282
Vigna vexillata (L.) A. Rich.			179041
LENTIBULARIACEAE			
Utricularia caerulea L.			186378
Utricularia graminifolia Vahl			179001
Utricularia lazulina P. Taylor			188519
Utricularia purpurascens J. Graham			124008
Utricularia reticulata Sm.			187982
Utricularia striatula Sm.			186737
Utricularia uliginosa Vahl.			124273
LOGANIACEAE			
Strychnos nux-vomica L.	Kajro		186766
Strychnos minor Dennst.			188546
LORANTHACEAE			
Dendrophthoe falcata (L. *f.*) Blume			6124(DD)
Elytranthe capitellata (Wight and Arn.) Engl.			186319
Scurrula parasitica L.			177981
Taxillus tomentosus (B. Heyne *ex* W. Roth) Tiegh.			2127(DD)
Tolypanthus lagenifer (Wight) Tiegh.		Endemic WG	186340
LYTHRACEAE			
Lagerstroemia microcarpa Wight	Nana		124361
Lagerstroemia parviflora Roxb.			187945
Rotala densiflora (Roth *ex* Roem. and Schult.) Koehne			179056
Rotala rotundifolia (Buch.- Ham. *ex* Roxb.) Koehne			187540
Woodfordia fruticosa (L.) Kurz	Dhayti		187512
MALPIGHIACEAE			
Aspidopterys canarensis Dalzell		Endemic WG	187593
MALVACEAE			
Abelmoschus manihot (L.) Medik.	Ambadi		187964
Abutilon persicum (Burm. *f.*) Merr.			85055
Daceschistia trilobata Wight		Endemic WG	124138
Hibiscus hirtus L.			179086
Hibiscus hispidissimus Griff.			179082

Table 1. ***Continued.***

SPECIES / FAMILY	LOCAL NAME	ENDEMISM	VOUCHER NUMBER *
Kydia calycina Roxb.			6098 (DD)
Sida acuta Burm *f.*			179226
Sida cordata (Burm. *f.*) Borss.			179092
Sida rhombifolia L.	Tupkadi		179034
Thespesia lampas (Cav.) Dalzell *ex* Dalzell and A. Gibson			187998
Urena lobata L.			179078
MARANTACEAE			
Schumannianthus virgatus (Roxb.) Rolfe			179270
MELASTOMATACEAE			
Melastoma malabathiricum L.			179250
Memecylon talbotianum D. Brandis			179049
Memecylon terminale Dalzell		Endemic PI	179285
Memecylon umbellatum Burm. *f.*			187584
Memecylon wightii Thwaites			85016
Osbeckia muralis Naud.			179006
MELIACEAE			
Aglaia eleagnoidea (A. Juss.) Benth.			1663 (DD)
Aglaia lawii (Wight) C. J. Saldanha *ex* Ramamoorthy	Maharsangal		186306
Chukrasia tabularis A. Juss.		Endemic IND	186997
Naregamia alata Wight and Arn.	Pitmado	Endemic IND	179133
Toona ciliata M. Roem.			3706(DD)
Trichlia connaroides (Wigh and Arn.) Bentv.			186323
Turraea villosa A. W. Benn.			1572A(GU)
Walsura trifoliata (A. Juss.) Harms			1710(GU)
MENISPERMACEAE			
Anamirta cocculus (L.) Wight and Arn.			186946
Cocculus hirsutus (L.) Theob.			186259
Cyclea peltata (Lam.) Hook. *f.* and Thomson,			186287
Diploclisia glaucescens (Blume) Diels	Ramwel, Ramrukhi		187911
Stephania elegans Hook. *f.* and Thomson			6143(DD)
Stephania japonica (Thunb.) Miers			179016
MOLLUGINACEAE			
Glinus oppositifolius (L.) A. DC.			186328
MORACEAE			
Artocarpus gomezianus Wall. *ex* Trecul subsp. *zeylanicus* Jarrett	Patphanas		186238
Artocarpus heterophyllus Lam.	Patphanas	Endemic WG	179135
Artocarpus hirsutus Lam.	Patphanas		193006
Ficus arnottiana (Miq.) Miq.	Payar		187952
Ficus benghalensis L.	Wad		88509
Ficus callosa Willd.			189338
Ficus drupacea Thunb. var. *pubescens* (Roth) Corner			88506
Ficus exasperata Vahl			186993
Ficus heterophylla L. *f.*			187580
Ficus hispida L. *f.*	Karwat		179115
Ficus microcarpa L. *f.*	Nandangol		186239
Ficus nervosa Heyne *ex* Roth			187987
Ficus racemosa L.	Rumad		188536
Ficus tinctoria G. Forst. subsp. *parasitica* (Koenig *ex* Willd.) Corner			186321
Ficus tsjahela Burm. *f.*	Kel		186330
MUSACEAE			
Ensete superbum (Roxb.) Cheesman		Endemic WG	188512
Musa x *paradisiaca* L.	Keli		189335
MYRISTICACEAE			
Knema attenuata (Wall. *ex* Hook. *f.* and Thomson) Warb.		Endemic WG	187521
Myristica malabarica Lam.		Endemic WG	187533
MYRSINACEAE			
Ardisia solanacea Roxb.	Bugadi		186285
Embelia tsjeriam-cottam (Roem. and Schult.) DC.			187949

Table 1. ***Continued.***

SPECIES / FAMILY	LOCAL NAME	ENDEMISM	VOUCHER NUMBER *
Maesa indica (Roxb.) DC.			186258
MYRTACEAE			
Eugenia mooniana Wight			186947
Eugenia roxburghii DC.			186261
Syzygium caryophyllatum (L.) Alston	Bhirand		187913
Syzygium cumini (L.) Skeels	Bhirand		187938
Syzygium hemisphericum (Wight) Alston	Zamlo		186341
Syzygium laetum (Buch.-Ham.) Gandhi		Endemic SWI	129287
Syzygium salicifolium (Wight) J. Graham		Endemic SWI	186342
Syzygium zeylanicum (L.) DC.			186793
OCHNACEAE			
Ochna obtusata DC.			187943
OLACACEAE			
Olax imbricata Roxb.			187569
OLEACEAE			
Jasminum coarctatum Roxb.			186348
Jasminum malabaricum Wight		Endemic PI	6146(DD)
Jasminum multiflorum (Burm. *f.*) Andr.			1481(GU)
Jasminum ritchiei C. B. Clarke			186360
Ligustrum perrottetii A. DC.		Endemic WG	179238
Olea dioica Roxb.			186260
Schrebera swietenoides Roxb.			187936
ONAGRACEAE			
Ludwigia hyssopifolia (G. Don) Exell			187554
Ludwigia octovalvis (Jacq.) P. H. Raven subsp. *octovalvis*			179009
Ludwigia octovalvis (Jacq.) P. H. Raven subsp. *sessiliflora* (Micheli) P. H. Raven			187565
ORCHIDACEAE			
Acampe praemorsa (Roxb.) Blatt. and McCann			187592
Aerides crispa Lindl.		Endemic WG	187901
Aerides maculosa Lindl.		Endemic PI	187932
Aerides ringens (Lindl.) C. E. C. Fisch.			189323
Bulbophyllum neilgherrense Wight	Bendli	Endemic WG	186795
Cleisostoma tenuifolium (L.) Garay			179065
Conchidium microchilos (Dalzell) Rauschert		Endemic PI	186394
Cottonia peduncularis (Lindl.) Rchb. *f.*			186982
Cymbidium aloifolium (L.) Sw.			129284
Dendrobium barbatulum Lindl.		Endemic WG	189324
Gastrochilus flabelliformis (Blatt. and McCann) C. J. Saldanha		Endemic WG	186797
Habenaria diphylla (Nimmo) Dalzell			188524
Habenaria heyneana Lindl.		Endemic PI	124151
Habenaria longicorniculata J. Graham		Endemic PI	124015
Habenaria marginata Coleb.			188524
Habenaria multicaudata Sedgew.		Endemic WG	124207
Habenaria plantaginea Lindl.			187971
Liparis deflexa Hook. *f.*			179179
Liparis nervosa (Thunb.) Lindl.			179193
Luisia tenuifolia Blume		Endemic WG	179064
Malaxis versicolor (Lindl.) Abeyw.			186349
Nervilia aragoana Gaudich.			187925
Oberonia brachyphylla Blatt. and McCann		Endemic WG	1528(GU)
Pecteilis gigantea (J. E. Sm.) Raf.			124428
Peristylus plantagineus (Lindl.) Lindl.			179194
Pholidota imbricata Hook.			176977
Porpax jerdoniana (Wight) Rolfe		Endemic WG	124438
Porpax reticulata Lindl.			186928
Rhynchostylis retusa (L.) Blume			187908
Smithsonia viridiflora (Dalzell) C. J. Saldhanha			186300
Tropidia angulosa (Lindl.) Blume			187515

Table 1. ***Continued.***

SPECIES / FAMILY	LOCAL NAME	ENDEMISM	VOUCHER NUMBER *
Vanda tessellata (Roxb.) Hook. *ex* G. Don			189322
Vanda testacea (Lindl.) Rchb.			189321
Zeuxine longilabris (Lindl) Trim			534(GU)
OROBANCHACEAE			
Aeginetia indica L.			124140
OXALIDACEAE			
Biophytum sensitivum (L.) DC.			179141
Oxalis corniculata L.			186276
PANDANACEAE			
Pandanus odorifer (Forssk.) Kuntze			186245
PAPAVERACEAE			
Argemone mexicana L.			179296
PASSIFLORACEAE			
Adenia hondala (Gaertn.) J. Wilde	Salkando		186310
PEDALIACEAE			
Sesamum orientale L.			187572
PIPERACEACE			
Peperomia pellucida (L.) Humb.			179174
Piper argyrophyllum Miq.	Miri		862(GU)
Piper nigrum L.			179251
PITTOSPORACEAE			
Pittosporum dasycaulon Miq.		Endemic WG	186373
POACEAE			
Apluda mutica L.			421(GU)
Arundinella leptochloa (Nees *ex* Steud.) Hook. *f.*		Endemic PI	186911
Arundinella metzii Hocht *ex* Micq.		Endemic PI	179100
Arundinella pumila (Hochst. *ex* A. Rich.) Steud.			1142(GU)
Bambusa bambos (L.) Voss			6090(DD)
Brachiaria ramosa (L.) Stapf			179030
Capillipedium filiculme (Hook. *f.*) Stapf		Endemic PI	413(GU)
Centotheca lappacea (L.) Desv.			179221
Cynodon dactylon (L.) Pers.			186324
Cyrtococcum oxyphyllum (Hochst. *ex* Steud.) Stapf			179088
Dendrocalamus strictus (Roxb.) Nees			3366(DD)
Dichanthium annulatum (Forssk..) Stapf			88485
Dimeria stapfiana C. E. Hubb. *ex* Pilger			179278
Echinochloa colona (L.) Link			186702
Eragrostis gangetica (Roxb.) Steud.			179152
Eragrostis unioloides (Retz.) Nees *ex* Steud.			188505
Eulalia trispicata (Schult.) Henrard			179205
Garnotia arborum Stapf. *ex* T. Cooke		Endemic PI	204(GU)
Glyphochloa acuminata (Hack.) Clayton		Endemic WG	186781
Glyphochloa veldkampii M. A. Fonseca *et* Janarth.		Endemic Goa	186907
Isachne globosa (Thunb.) Kuntze			179182
Ischaemum barbatum Retz.			188531
Ischaemum dalzellii Stapf. *ex* Bor			1149(GU)
Ischaemum semisagittatum Roxb.			179207
Jansenella griffithiana (C. Muell.) Bor			179207
Ochlandra talboti Brandis			6135(DD)
Oplismenus burmanni (Retz.) P. Beauv.			1159(GU)
Oplismenus compositus (L.) P. Beauv.			179089
Panicum antidotle Retz.			1148(GU)
Paspalum canarae (Steud.) Veldk.			1121(GU)
Paspalum scrobiculatum L.			179189
Pennisetum pedicellatum Trin.			187578
Pennisetum polystachion (L.) Schult.			187504
Polytrias indica (Houtt.) Veldkamp			179204
Pseudanthistiria heteroclita (Roxb.) Hook. *f.*			179153

Table 1. ***Continued.***

SPECIES / FAMILY	LOCAL NAME	ENDEMISM	VOUCHER NUMBER *
Pseudoxytenanthera stocksii (Munro) T. Q. Nguyen			1896(DD)
Sacciolepis indica (L.) A. Chase			179187
Setaria pumila (Poir.) Roem. and Schult.			42(GU)
*Spodiopogon rhizo*phorus (Steud.) Pilger			1150(GU)
Themeda triandra Forssk.			186780
PODOSTEMACEAE			
Dalzellia ceylanica (Gardn.) Wight			1002 (AHMA)
Zeylanidium sessile (Willis) C. D. K. Cook and Rutish.			12630 (AHMA)
POLYGALACEAE			
Polygala elongata Klein *ex* Willd.		Endemic IND	186726
Salmonia ciliata (L.) DC.			179066
POLYGONACEAE			
Persicaria glabra (Willd.) M. Gomez			179254
Persicaria auriculata (Meissn.) S. K. Dixit, B. Datt and G. P. Roy			189318
Polygonum plebeium R. Br.			186969
PONTEDERIACEAE			
Monochoria vaginalis (Burm. *f.*) C. Presl			187950
PORTULACACEAE			
Portulaca oleracea L.	Gungune		187579
RANUNCULACEAE			
Clematis gauriana Roxb. *ex* DC.			179255
Naravelia zeylanica (L.) DC.			186367
RHIZOPHORACEAE			
Carallia brachiata (Lour.) Merr.	Phanshi		179259
RHAMNACEAE			
Gauania microcarpa DC.			188589
Scutia myrtina (Burm. *f.*) Kurz.			187543
Smythea bombaiensis (Dalzell) S. P. Banerjee and P. K. Mukh.		Endemic WG	1280(GU)
Ventilago denticulata Willd.		Endemic IND	186317
Ziziphus mauritiana Lam.			187917
Ziziphus oenoplia (L.) Mill.			186790
Ziziphus rugosa Lam.	Churan		187535
Ziziphus xylopyra (Retz.) Willd.			179258
RUBIACEAE			
Argostemma courtallense Arn.		Endemic WG	186777
Argostemma verticillatum Wall.			186753
Canthium rheedei DC.			186233
Catunaregam spinosa (Thunb.) Tirveng.	Gela		189334
Chassalia curviflora (Wall.) Thwaites var. *ophioxyloides* (Wall.) Deb and B. Krishna			179077
Discospermum sphaerocarpum Dalzell *ex* Hook. *f.*			187524
Haldina cordifolia (Roxb.) Ridsdale	Hedu		179168
Hedyotis auricularia L.			179107
Hedyotis corymbosa (L.) Lam.			186757
Hedyotis herbacea L.			179210
Hedyotis trinervia (Retz.) Roem. and Schult.			186345
Hymenodictyon obovatum Wall.		Endemic IND	186927
Ixora brachiata Roxb.		Endemic IND	186269
Ixora coccinia L.	Pentkul		186278
Ixora elongata B. Heyne *ex* G. Don			2398(DD)
Ixora malabarica (Dennst.) Mabb.			179292
Ixora nigricans R. Br. *ex* Wight and Arn.			186267
Meyna laxiflora Robyns			179244
Mitragyna parvifolia (Roxb.) Korth.			186758
Mussaenda glabrata (Hook. *f.*) Hutch. *ex* Gamble	Sharwad	Endemic PI	179125
Mussaenda laxa (Hook. *f.*) Hutch. *ex* Gamble	Sharwad	Endemic WI	124109
Neanotis rheedei (Wall. *ex* Wight and Arn.) W. H. Lewis		Endemic WG	179144
Neanotis subtilis (Miq.) Govaerts		Endemic WG	186382

Table 1. ***Continued.***

SPECIES / FAMILY	LOCAL NAME	ENDEMISM	VOUCHER NUMBER *
Neolamarckia cadamba (Roxb.) Bosser	Kadamb		187590
Neonauclea purpurea (Roxb.) Merr.			1610 (BLAT)
Ophiorrhiza rugosa Wall. var. *prostrata* (D. Don) Deb and D. C. Mondal			124256
Oxyceros rugulosus (Thw) Tirveng.			188584
Pavetta crassicaulis Bremek.			187923
Pavetta indica L. var. *tomentosa* (Roxb. *ex* Sm.) Hook. *f.*			179055
Psychotria dalzellii Hook. *f.*	Endi	Endemic WG	179165
Psydrax umbellata (Wight) Bridson	Tupya		186935
Rubia cordifolia L.			186243
Saprosma glomeratum (Gardn.) Bedd.		Endemic PI	27757 (BLAT)
Spermacoce articularis L.			179012
Spermacoce ocymoides Burm. *f.*			186763
Spermacoce pusilla Wall.			186221
Tamilnadia uliginosa (Retz.) Tirveng. and Sastre			124347
Wendlandia thyrsoidea (Roth) Steud.		Endemic WG	186229
RUTACEAE			
Atlantia racemosa Wight	Malkadlimbi		179237
Atlantia wightii Tanaka		Endemic WG	1360(GU)
Glycosmis pentaphylla (Retz.) DC.	Menaka		179081
Luvunga eleutherandra Dalzell		Endemic WG	179241
Milicope lunu-ankenda (Gaertn.) T. G. Hartely			186996
Murraya koenigii (L.) Spreng.	Karpil		186248
Murraya paniculata Jack			179072
Paramigna monophylla Wight			186909
Toddalia asiatica (L.) Lam.			12197 (AHMA)
Zanthoxylum rhetsa (Roxb.) DC.	Tirphal		186918
SANTALACEAE			
Osyris quadripartita Salzm. *ex* Decne.			85039
SAPINDACEAE			
Allophylus cobbe (L.) Raeusch.			179120
Dimocarus longan Lour.			187910
Harpullia arborea (Blanco) Radlk.			1775(GU)
Lepisanthus tetraphylla (Vahl) Radlk.			187902
Schleichera oleosa (Lour.) Oken	Koshim		189317
SAPOTACEAE			
Chrysophyllum roxburghii G. Don			713(GU)
Mimusops elengi L.	Owal		88513 (DD)
Palaquium ellipticum (Dalzell) Baill.			179243
Xantolis tomentosa (Roxb.) Raf.	Kumbal		179126
SCROPHULARIACEAE			
Angelonia gardneri Hook.			186708
Centranthera indica (L.) Gamble			179018
Dopatrium junceum (Roxb.) Buch.-Ham. *ex* Benth.			186902
Lindernia antipoda (L.) Alston.			186933
Lindernia caespitosa (Blume) Panigrahi			187561
Lindernia ciliata (Colsm.) Pennell			186375
Lindernia crustacea (L.) F. Muell.			179050A
Lindernia multiflora (Roxb.) Mukerjee			186762
Lindernia oppositifolia (Retz.) Mukerjee			186344
Mecardonia procumbens (Mill.) Small			187576
Rhamphicarpa longiflora (Arn.) Benth.		Endemic WG	186386
Scoparia dulcis L.			186226
Striga asiatica (L.) Kuntze			179175
Striga gesnerioides (Willd.) Vatke *ex* Engl.			186716
Torenia indica C. J. Saldanha		Endemic WG	179154
Torenia violacea (Azaolo *ex* Blanco) Pennell			186775
SMILACACEAE			
Smilax zeylanica L.			179128

TABLE 1. ***CONTINUED.***

SPECIES / FAMILY	LOCAL NAME	ENDEMISM	VOUCHER NUMBER *
SOLANACEAE			
Lycianthes laevis (Dunal) Bitter			186709
Physalis minima L.			179160
Solanum anguivi Lam.			179172
STERCULIACEAE			
Helicteres isora L.	Kewan		179035
Melochia corchorifolia L.			179158
Pterospermum diversifolium Blume	Mothi Daman		186906
Sterculia guttata Roxb. *ex* DC.			179024
SYMPLOCACEAE			
Symplocos cochinchinensis (Lour.) S. Moore subsp. *laurina* (Retz.) Noot.			92999
Symplocos racemosa Roxb.			186257
THYMELAEACEAE			
Gnidia glauca (Fresen.) Gilg.			186255
TILIACEAE			
Corchorus capsularis L.			186938
Corchorus olitorius L.			179027
Grewia nervosa (Lour.) Panigrahi	Asoli, Chiwar		179143
Grewia serrulata DC.	Chopdi		179271
Grewia tillifolia Vahl	Dhaman		186281
Triumfetta rhomboidea Jacq.			179094
ULMACEAE			
Celtis timorensis Spanoghe			186302
Holoptelea integrifolia (Roxb.) Planch.	Wawal		179114
Trema orientalis (L.) Blume			179022
URTICACEAE			
Boehmeria macrophylla Hornem.			178958
Debregeasia longifolia (Burm *f.*) Wedd.			186322
Laportea interrupta (L.) Chew			186701
Pilea microphylla (L.) Liebm.			186395
VERBENACEAE			
Lantana camara L.			188556
VISCACEAE			
Viscum monoicum Roxb. *ex* DC.			186282
VITACEAE			
Ampelocissus indica (L.) Planch.			186714
Amplelocissus latifolia (Roxb.) Planch.			186705
Caryatia tenuifolia (Wight and Arn.) Gagnep.			1357(GU)
Caryatia trifolia (L.) Domin			186799
Cissus elongata Roxb.			179265
Cissus javanica DC.			179033
Cissus rependa Vahl	Palkonde		186307
Cyphostemma auriculatum (Roxb.) P. Singh and B. V. Shetty			2574(DD)
Tetrastigma sulcatum (M. A. Lawson) Gamble			189329
ZINGIBERACEAE			
Alpinia galanga (L.) Willd.			179295
Curcuma decipiens Dalzell		Endemic PI	124305
Curcuma zanthorrhiza Roxb.			124007
Kaempferia scaposa (Nimmo) Benth.		Endemic WG	186740
Zingiber neesanum (J. Graham) Ramamoorthy		Endemic PI	12203
Zingiber nimmonii (J. Graham) Dalzell		Endemic PI	179118
Zingiber zerumbet (L.) Roscoe *ex* J. E. Sm.			188516

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Literature Cited

Champion, H.G. and S.K. Seth. 1968. *A Revised Survey of the Forest Types of India*. Delhi: Manager of Publications. 404 p.

Dalgado, D.G. 1898. *Fl. de Goa e Sawantwadi*. Lisbon : William F. Halle Books. 290 p.

Karthikeyan, S. 2000. *A Statistical Analysis of Flowering Plants of India*; pp. 201-217 *In* N.P. Singh, D. K. Singh, P. K. Hajra and B.D. Sharma (ed.). *Flora of India- Introductory Volume* (Part II). Kolkata : Botanical Survey of India.

Karthikeyan, S., M. Sanjappa and S. Moorthy. 2009. *Flowering Plants of India, Dicotyledones,* vol 1. Kolkata: Botanical Survey of India. 365 p.

Naik, R.N. 1995. *Management Plan for Bhagwan Mahaveer Wildlife Sanctuary, Molem.* Goa: Forest Department Goa. 147 p.

Naithani, H.B., K.C. Sahni and S.S.R. Bennet. 1997. *Forest Flora of Goa*. Dehra Dun: International Book Distributors. 666 p.

National Wildlife Database, Wildlife Institute of India. 2010. *Database of Protected areas of India.* Electronic Database accessible at http://www.wii.gov.in/index.php?option=com_content&view=article&id=144&Itemid=318. Captured on 12 August 2011.

Rao, R.S. 1985-86. *Flora of Goa, Diu, Daman, Dadra and Nagarhaveli.* Vol. 1 & 2. Calcutta: Botanical Survey of India. 546 p.

The Plant List 2010. Version 1. Elecronic database available on http://www.theplantlist.org Captured on 26 November 2012.

Vartak, V.D. 1966. *Enumeration of Plants from Gomantak*. Pune: Maharashtra Association for Cultivation of Science. 144 p.

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Check List
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LISTS OF SPECIES

Check List of Wild Angiosperms of Bhagwan Mahavir (Molem) National Park, Goa, India

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ERRATUM

Though most species in the figures are endemic, a few of them are not. So the legend of **Figures 2-5** (pages 188-191) should be: "Some plant species from the National Park (...)".

In **FIGURE 4**, page 190, "*mammea suriga*" should be *Mammea suriga*.

The authors regret these errors.

June 2013